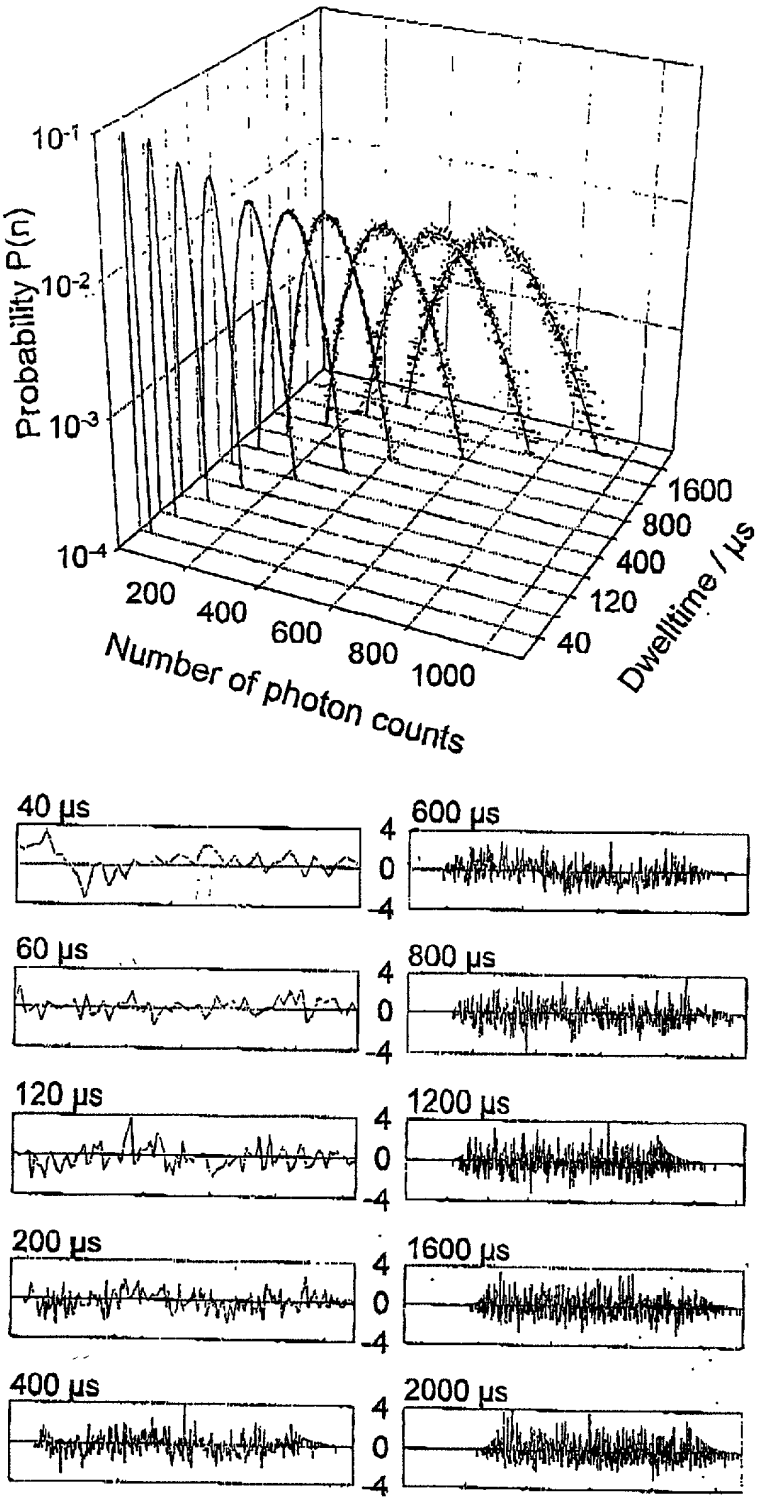

Probability P(n)
10-1
10-2
10-3
10-4
200
400
600
800
1000
Number of photon counts
1600
800
400
120
40
Dwelltime / µs
40 µs
600 µs
60 µs
800 µs
120 µs
1200 µs
200 µs
1600 µs
400 µs
2000 µs
4
0
-4

Figur 1

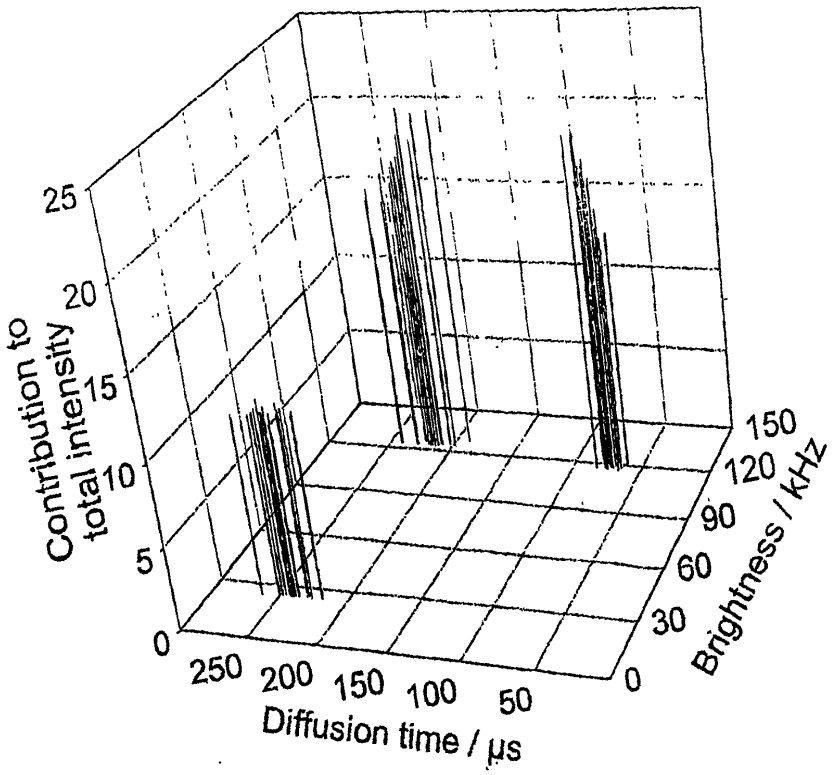
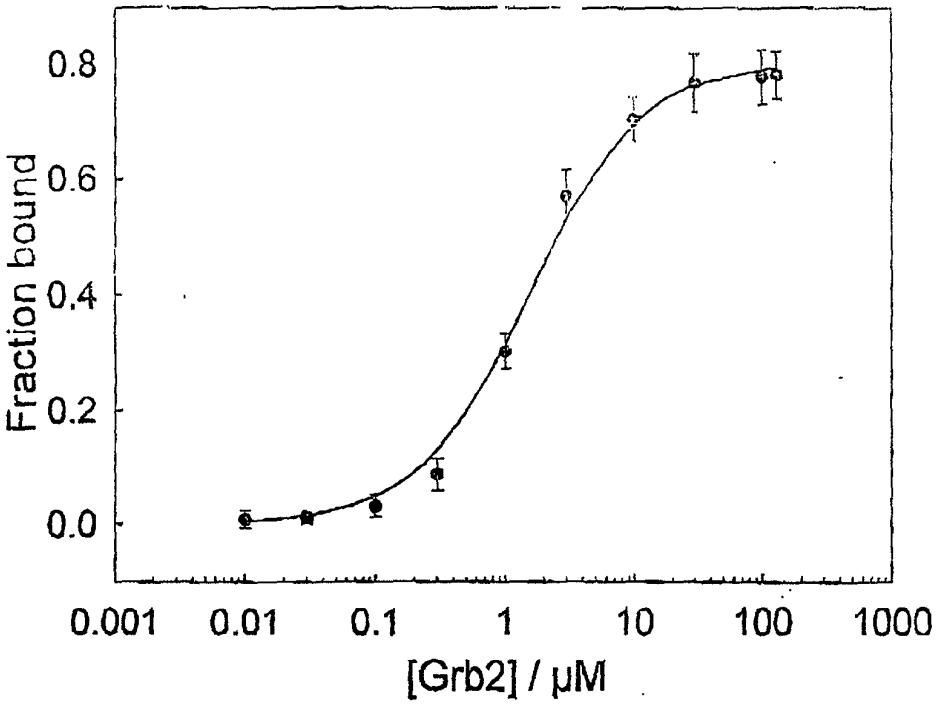

Contribution to total intensity
25
20
15
10
5
0
250
200
150
100
50
Diffusion time / µs
0
30
60
90
120
150
Brightness / kHz

Figure 2



Figur 3

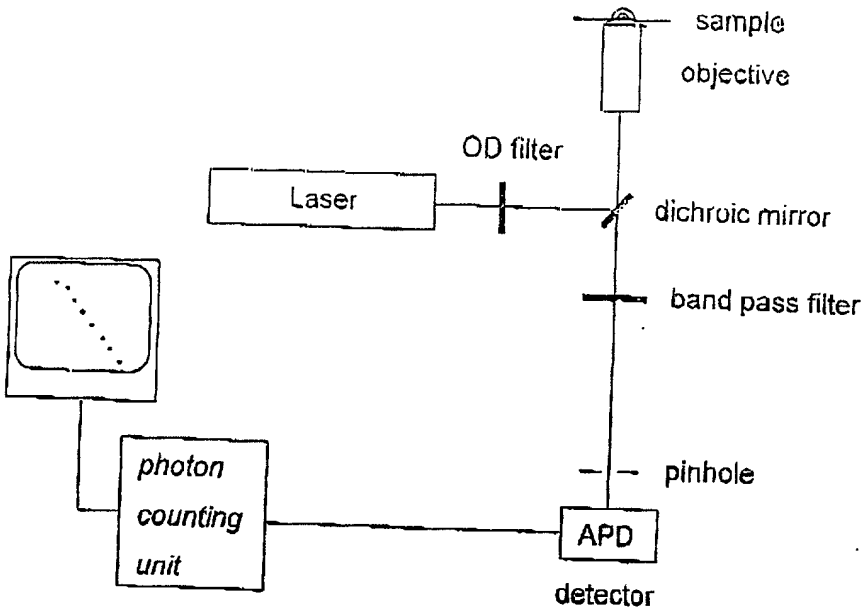

sample
objective
OD filter
Laser
dichroic mirror
band pass filter
photon
counting
unit
pinhole
APD
detector

Figure 4

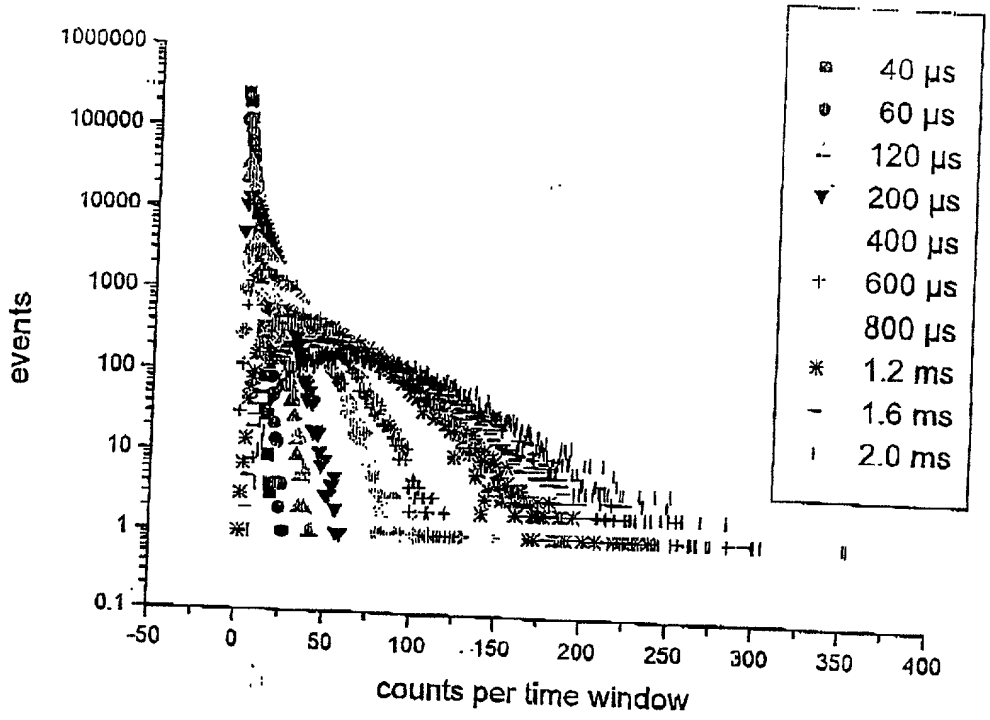

1000000
100000
10000
1000
100
10
1
0.1
events
-50
0
50
100
150
200
250
300
350
400
counts per time window
40 µs
60 µs
120 µs
200 µs
400 µs
600 µs
800 µs
1.2 ms
1.6 ms
2.0 ms

Figure 5

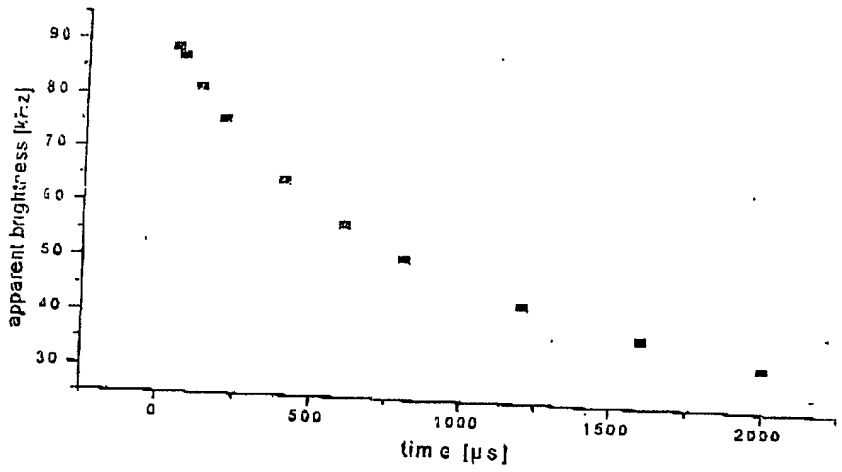
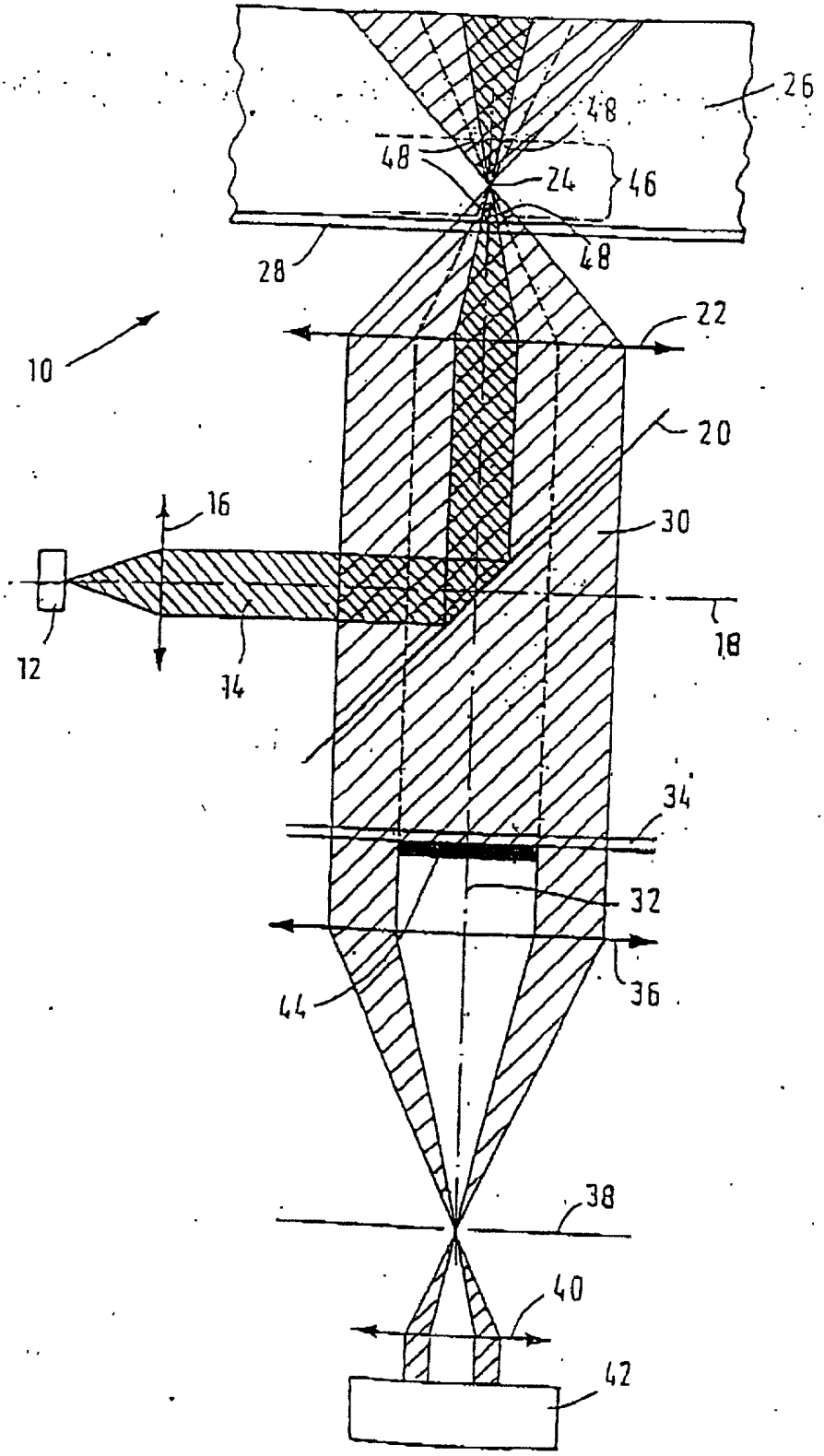

apparent brightness [kHz]
90
80
70
60
50
40
30
0
500
1000
1500
2000
time [µs]

Figure 6


26
48
48
24
46
48
28
22
10
20
16
30
12
14
18
34
32
36
44
38
40
42